Massachusetts Department of Environmental Protection Drinking Water Program Instructions for the Electronic Annual Statistical Report (eASR)

(This document will be updated as needed during the time eASR reporting is being conducted)

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1.0 What's New for 2018

Treatment Plant and Treatment Tables

- Be sure to thoroughly review the Treatment Plant section of the ASR.
 - o Check for accuracy of treatment plant names (Item 1) and the sources treated (Item 2)
 - o Ensure all chemicals applied are listed and those no longer in use are end-dated.
- If you have any questions or discrepancies please contact your Regional Office.

2.0 eDEP

2.1 eDEP Help & Instructions

You can find general help and instructions for using eDEP at http://www.mass.gov/eea/agencies/massdep/service/online/edep-instructions-and-frequently-asked-questions.html.

2.2 eDEP Contacts & Feedback

If you experience technical problems using eDEP or have questions not directly related to the Annual Statistical Report questions, such as resetting your password or being unable to login to your account, please contact the EEA Help Desk at:

Email: eea.servicedesk@state.ma.us

Phone: (617) 626-1111

For questions related to the Annual Statistical Report please contact the Drinking Water Program.

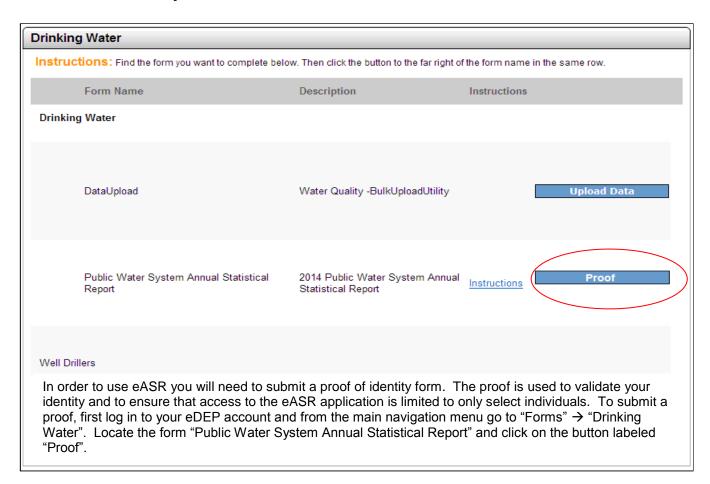
Andrew Durham: andrew.durham@state.ma.us, (617) 574-6855

Tio Yano: tio.yano@state.ma.us, (617) 292-5843

Damon Guterman: damon.guterman@state.ma.us, (617) 574-6811

2.3 eASR Requirements

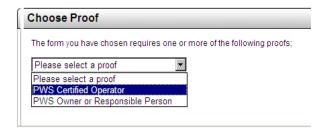
2.3.1 Proof of Identity



Select the appropriate type of proof from the drop-down list.

PWS Certified Operator – Select this type if you are a certified operator employed by a PWS.

PWS Owner or Responsible Person – Select this type if you are the legally responsible individual of the PWS with or without a certified operator license.



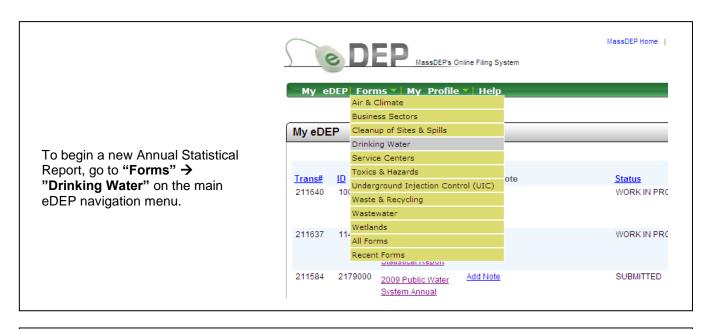
Print the proof using the "Print" button located at the bottom of the form. After having the form notarized, mail the form to:

Massachusetts Dept. of Environmental Protection Drinking Water Program – 5th Floor 1 Winter Street Boston, MA 02108 Attn: ASR Proof

It will take approximately three to five days after receiving the form to process the request. After your proof has been accepted you will receive an email confirmation and you will be able to access the eASR web application through eDEP.



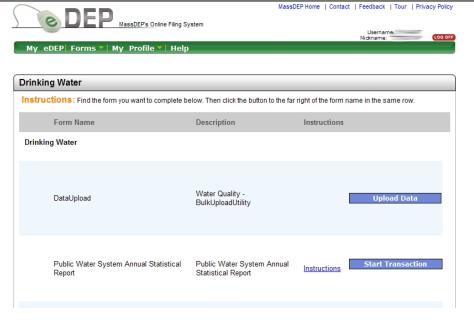
3.0 Getting Started



If you have completed the proof process as described in section 1.1, you will see a "Start Transaction" button for the form "Public Water System Annual Statistical Report".

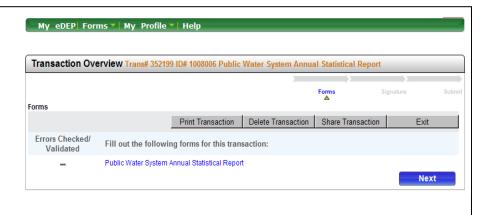
If you have not completed the proof process you will need to complete the proof process before you can begin a new eASR (See Section 1.1).

Click on "Start Transaction" to begin a new Annual Statistical Report.



My eDEP Forms | My Profile | Help Preform Enter the PWS ID of the system for which you are submitting the Preform: Public Water System Annual Statistical Report Annual Statistical Report. Then 1008006 press "search." If the PWS Details Reporting/Calendar Year: 2010 are correct press "Next." If the PWS ID was incorrectly entered search you can enter a new PWS ID and PWS Details PWS Name: DCR NOTCH VISITORS CENTER search again. PWS City: AMHERST Next

After confirming the PWS for which you are submitting, you will be taken to the transaction overview page. Note the steps in the process appear above the Forms list. Click the "Next" button to load all of the forms associated with the PWS.



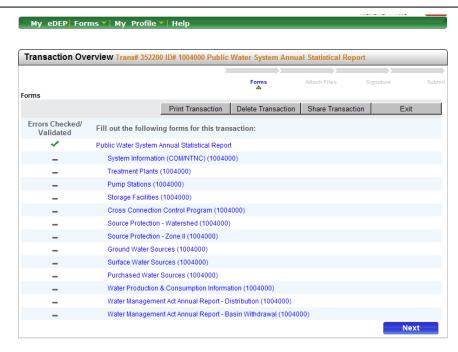
Public Water System Annual Statistical Report - Transaction #352199 Verify basic information Massachusetts Department of Environmental Protection regarding the PWS. If there are Bureau of Resource Protection – Drinking Water Program Public Water Supply Annual Statistical Report inaccuracies in the data, you Reporting Year 2010 will be able to change this on 2010 Public Water Supply Verification the System Information form. Click on "Continue" at the Please verify the information below and then click the Continue button. bottom of the screen. PWS Name DCR NOTCH VISITORS CENTER PWS Street Address Line 1: 1500 WEST ST PWS Street Address Line 2: AMHERST City/Town: State Zip Code: 01002 Report Year: 2010 Continue

3.1 Navigation

The overview now contains a listing of all of this PWS's forms. The listing of forms may differ from one PWS to another. This example shows a Community system. The green check mark indicates that the Verification form has been completed.

You are not required to fill out the forms in the order in which they appear. Click any form name to open that form.

Clicking the "Next" button will take you to the first form in the list which has not been "Error Checked/Validated".





Above the forms listing are buttons you can use to print the Annual Statistical Report (see Section 3.3), Delete the Annual Statistical Report, Share the Annual Statistical Report (See Section 3.2), and Exit the eASR application.



Every form contains a set of standard buttons which you will use to interact with the form.

"Error Check" is used to check the form for errors. Any errors on the form will be reported at the bottom of the form. For more information on Error Reporting see Section 2.2. If there are no errors on the form "Error Check" will mark the form as valid, save, and bring you back to the forms listing.

"Save" is used to the save progress on the form. "Save" does not check the form for errors. "Save" will save the form regardless of whether there are errors on the form or not.

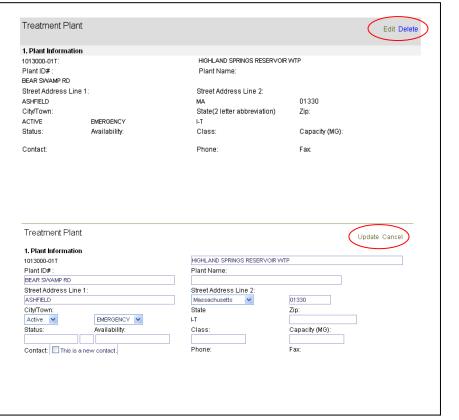
"Instructions" will open a new browser window to the web page that has these instructions.

"Print" is used to send a print job. Clicking this button will prompt the eASR application to create a PDF version of the Annual Statistical Report. Note that "Print" will close the form you have open. For more information on printing an Annual Statistical Report see Section 3.3.

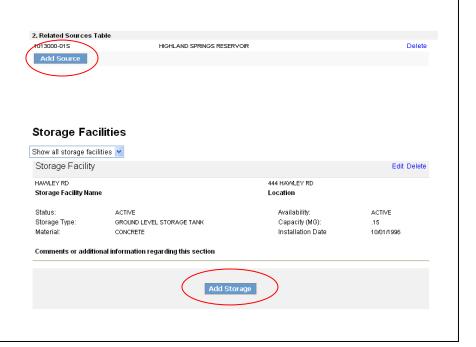
"Exit" will take you back to the forms listing. You will be asked if you want to save the form before returning to the forms list.

Many of the forms are presented in sections which need to be opened in order to make changes. Click the "Edit" link in the upper right-hand corner to open the section for changes. After making your changes click on "Update" to save and close the section. "Cancel" will close the section without saving your changes. You can then continue working on the rest of the form.

For any section where data can be deleted there will be a "Delete" link next to the "Edit" link. Clicking on the "Delete" button will either mark the specific entry for deletion or will delete the entry from the form. The method used is dependent on the form and section of the form. When an entry is marked for deletion, it will be highlighted in either yellow or red.



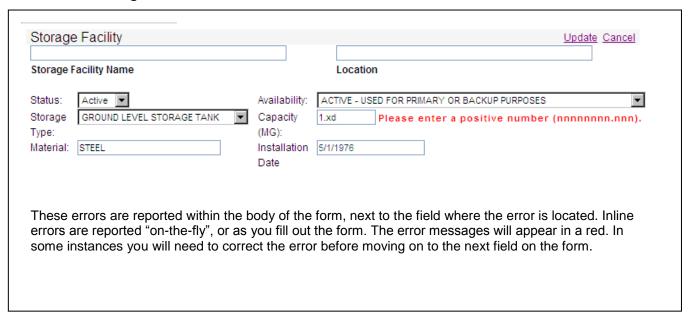
At the bottom of many sections and forms are "Add" buttons used to add new entries. Clicking on the "Add" button will create a new row or section where you can enter data.



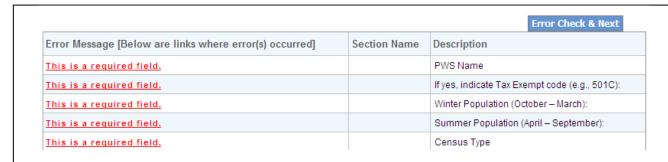
3.2 Error Messages

There are two types of error messages in the eASR application:

Inline Errors Messages



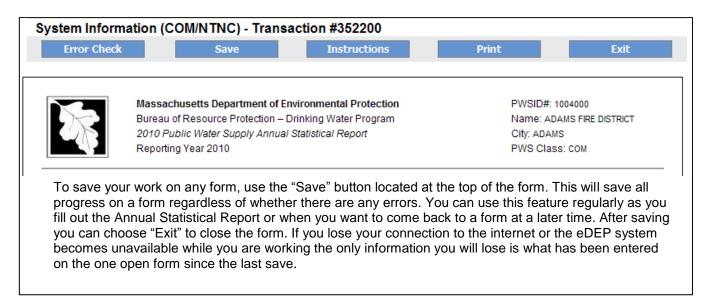
Error Check Messages



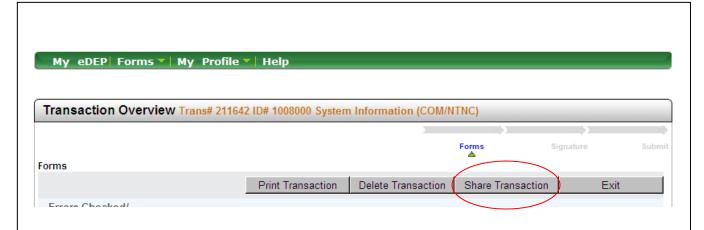
These errors are reported only after clicking on either the "Error Check" button (at the top of the form) or the "Error Check & Next" button (at the bottom of the form). Error check messages will appear at the bottom of screen. Error Check messages will contain a link (in red) to the error, the location of the error on the form, and a description of the error. Clicking on the link will take you to the error on the form.

4.0 General Tasks

4.1 Saving



4.2 Sharing



The eASR application features the ability to share your report among other eDEP users. Using this feature, you can easily collaborate in order to complete the ASR or send a completed ASR to interested parties. If you plan on sharing the ASR, each person will need to have their own eDEP account. All you will need to know is the nickname of the account with which you want to share. These other users do not need to have a proof (see Section 1.1) to work on your eASR but they will not be able to sign an eASR without a proof.

To share an ASR submittal select "Share Transaction" from the menu located on the overview page.

My eDEP Forms ▼ My Profile ▼ Hel The box labeled "Shared with" will list all eDEP accounts that **Share Submittal** currently have access to the Annual Statistical Report. This page enables you to share this submittal with other eDEP users. To add a user with whom you would like to share the submittal, click on the Add a User button (below). To share with another eDEP user, you must know that user's eDEP nickname. Once you have indicated the eDEP nickname of the user with whom you would like to share the submittal you must specify the role (i.e., the privileges). To add a new account to the that you would like to grant to that user. You may also put a limit on the time period for which the role is valid for the user. If you give the user the Owner role, you will lose the ability to add further users for sharing of this submittal, because only the Owner possesses that share list, click on "Add". privilege. 211687 Transaction # Form Name Shared with

Enter an eDEP account nickname in the box labeled "Share With". Do not enter the account username. You must use the account nickname to successfully share an Annual Statistical Report.



You have a choice of 5 different roles you may grant someone who is sharing the Annual Statistical Report.

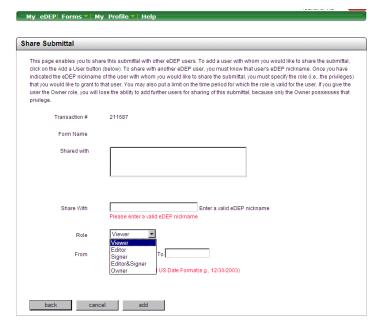
Viewer – This permission level will allow the individual read-only access to the Annual Statistical Report.

Editor – This permission level will allow the individual to change and save new data to the Annual Statistical Report.

Signer – This permission level will allow the individual to sign and submit the Annual Statistical Report, without being able to make changes to the Report.

Editor & Signer – This permission level will allow the individual to make changes to and sign and submit the Annual Statistical Report.

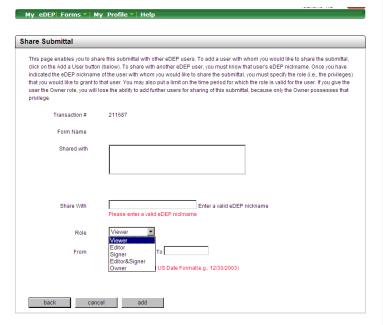
Owner – This permission level will hand over complete control of the Annual Statistical Report to the specified account. If you select this option you will no longer be able to make changes to the form, sign and submit, and share the Annual Statistical Report.



You can choose to share the Annual Statistical Report for a set period of time. The account with which you share the ASR will have access to the forms only during this time period.

To assign an access time period, enter a beginning date and end date in the "From" and "To" boxes, respectively.

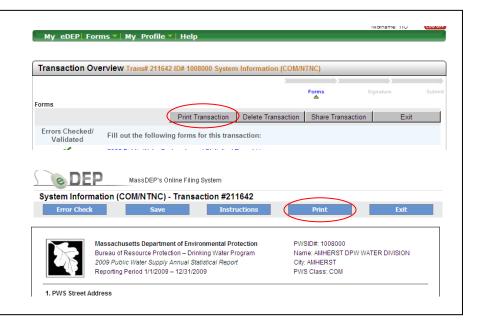
Click the "add" button when done. The account along with their role will now appear in the "Shared with" box. Click the "back" button at the bottom of the screen to return to the transaction overview page.

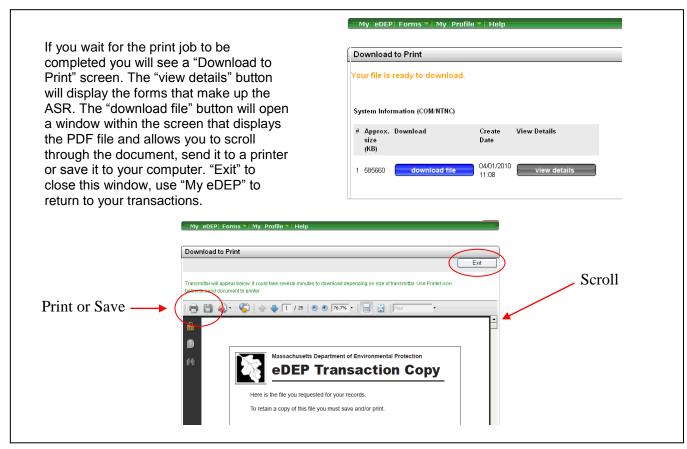


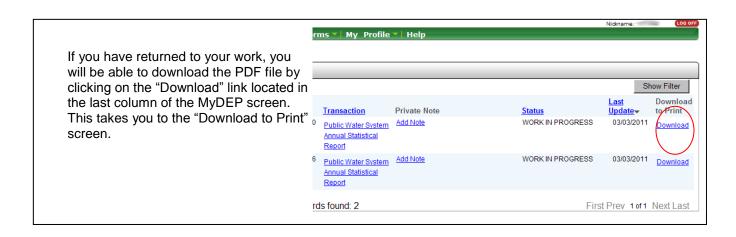
4.3 Printing

You can print the Annual Statistical Report by clicking on "Print Transaction" on the forms listing page or by clicking on "Print" at the top of any of the forms pages.

Note: Either option will print the whole Annual Statistical Report package. If you choose "Print" within a form you will be prompted to save your work as printing will close that form.

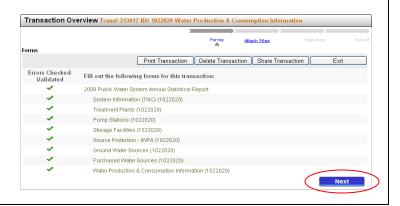






4.4 Submitting

Once you have completed and validated all the forms that make up your Annual Statistical Report the "Next" button will start you on the final few steps to send your report to MassDEP.



At several points in different forms you may have been given an option of submitting additional information via an attachment.

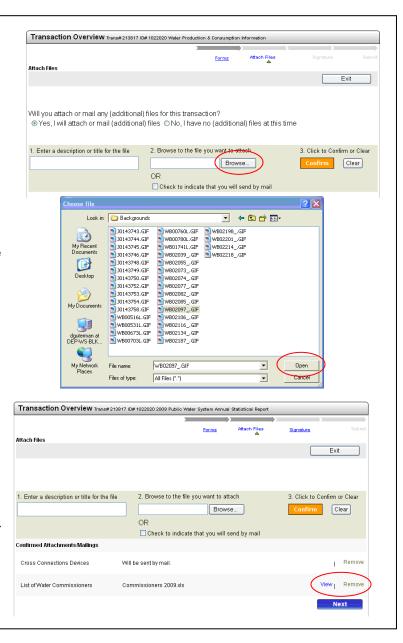
If you do not have any attachments check "No."

To submit an attachment check "Yes." Enter a description in Box 1 of the first file you want to attach and then use the "Browse" button to find the file on your computer. A "Choose file" window will appear where you can navigate to the file location, select it with your cursor and then press "Open" to paste the location into the Box 2. Click the "Confirm" button. The file will then appear in a list below the selection boxes. You can repeat this process as many times as necessary to attach all your files.

If an attachment is not available electronically describe the material in Box 1, check the mailing box below Box 2 then press "Confirm." You will need to mail this attachment to the Drinking Water Program, MassDEP, 1 Winter Street, 5th Floor, Boston, MA 02108.

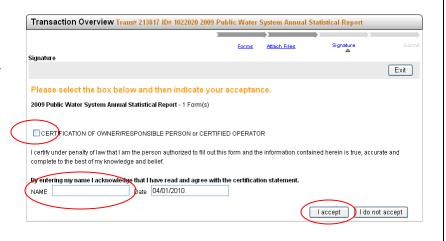
Note that you can both View (electronic files only) and/or Remove (any type) your confirmed attachments using the links to the right of the file name(s).

When complete, choose "Next."



You must sign your report prior to submittal. You need to check the certification box, read the certification statement, Type your name (not your eDEP account name) then press the "I accept" button.

This will take you back to the Transaction overview screen where you get one last chance to review what you are submitting. Select "Next" to move to submittal.

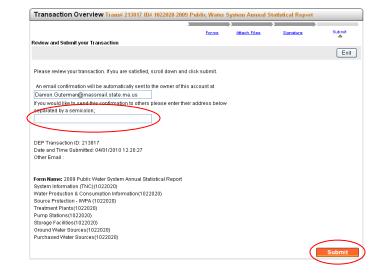


Once you submit an email is automatically sent to the email address for your eDEP account. You can copy additional email addresses as well by typing them into the second box.

The DEP Transaction ID, Date and Time Submitted as well as the forms that make up your ASR are listed.

Press "Submit" to send your report.

A receipt will appear on the screen that you can print and save.



5.0 Form Specific Instructions

5.1 Legally Responsible Party (Pre-Form)

Legally Responsible Party:

Before you can access the forms that make up the Annual Statistical Report you are required to provide the contact information for the legally responsible party.

014	Public W	ater Supply Verifica	ition					
Please verify the information below and then click the Continue button.								
PWS ID:		2115011						
PWS Name:		GROTON CONVENIENCE						
PWS Street Address Line 1:		871 BOSTON RD						
PWS Street Addre	ess Line 2:							
City/Town:		GROTON						
State:		MA						
Zip Code:		01450						
Class:		TNC						
Report Year:		2014						
Legal Information								
First Name								
Middle Initial								
Last Name								
Company Name								
Phone Number								
Street Address 1								
Street Address 2								
City/Town								
State								
Zip Code								
2.p 5000								

5.2 System Information (COM/NTNC, TNC or Vendor)

Use your mouse to position the cursor into any field you want to edit. The Tab key will also allow you to move from field to field. Pre-populated information can in most cases be overwritten – backspace or highlight and delete to remove incorrect information.

PWS Street Address:

Provide the PWS Name, PWS Street Address (two lines if needed), City/Town, State, Zip Code, Phone Number, Fax Number, and Web Site Address of the PWS (if available).

PWS Mailing Address:

Provide the Mailing Name and Mailing Address for the PWS. Checking the "Same as Street Address" box will copy the street address information into the mailing address fields.

Vending Machine Information: (Vendor only)

Provide Vending Machine Manufacturer, make, Model #, Location of Vending Machine and Date Approved by MassDEP.

Seasonal System: (NTNC, TNC and Vendor only)

If your system was open less than full year check "Yes" and enter your Opens and Closes dates as Month/Day (MM/DD).

PWS Off Season Mailing Address: (NTNC, TNC and Vendor only)

If you answered "Yes" to the Seasonal System question and you have a different address when your system is closed provide Off Season Mailing Name, Off Season Mailing address (two lines if needed), City/Town, State, Zip Code, Off Season Phone Number, Off Season Fax Number, Off Season Address Starts and Off Season Address Ends as Month/Day (MM/DD).

Owner Information:

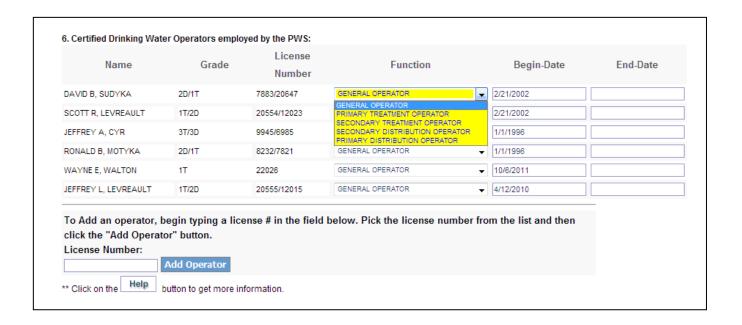
Provide the name of the owner of the PWS and Phone Number, if the PWS is not a municipal supply. For municipal supplies, leave blank.

Primary Contact:

Provide the name, phone number and email address of the primary contact for the PWS.

Certified Drinking Water Operators employed by the PWS:

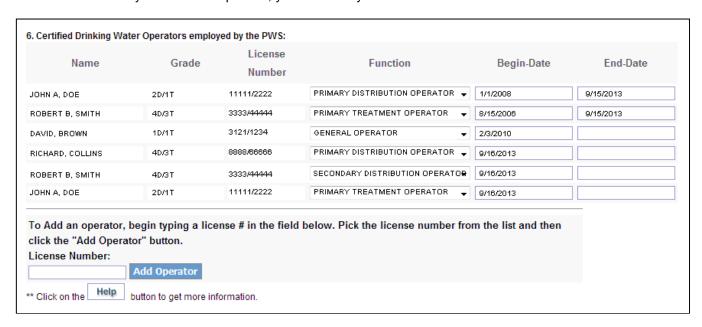
The table is pre-populated with data from the previous year's Annual Statistical Report. Each row in the table lists the operators full name, license grade, license number, function, start-date, and end-date. The only editable fields are Function, Begin-Date, and End-Date.



You should fill in the table to reflect the role/function each operator performed for the calendar year. The "Begin-Date" is the date the operator assumed the role selected in the "Function" field. The "End-Date" is the date the operator resigned from the role selected in "Function".

Example:

If an operator functioned as the Primary Distribution Operator from January 1, 2008 to September 15, 2013 and then assumed the role of Primary Treatment Operator, while the previous Primary Treatment Operator assumed the role of Secondary Distribution Operator, your table may look like this:



Certified operator staffing requirements can be found on the MassDEP website at https://www.mass.gov/service-details/certified-operator-staffing-requirements.

Primary Certified Operator Contact Information:

When you identify the primary certified distribution operator and the primary certified treatment operator, the contact information for these primary operators will be automatically populated. Most of this information is provided to MassDEP from the Massachusetts Board of Professional Licensure. The only fields that can be edited are phone number, fax number, and email address.

Tenants: (TNC only)

In order to understand the nature of the population served by Transient Non-Community systems we are asking for a list of tenants that occupy space at the system. Provide the Business Name and Type of Activity.

Contract Operator Services:

If applicable, verify whether your system has a signed Compliance Notice approved by MassDEP.

Water Commissioners/Selectmen/Trustees/Board Members: (COM/NTNC only)

Provide the Name, Phone Number and Title of these individuals. Alternatively, you can indicate that you will provide this information as an attachment (see Section 3.4)

Owner Type:

Choose from the options, "Municipal", "State Government", "Federal Government", "Private", "Mixed Public/Private."

Federal Employment Identification Number (FEIN):

This is the 9 digit identification number provided to your business for tax purposes – **Do Not Enter Your Social Security Number in this field**. Enter this ID without dashes. The Secretary of State's Office has a web site where you may be able to look up these IDs - http://corp.sec.state.ma.us/corpweb/corpsearch/CorpSearch.aspx.

Not For Profit:

Indicate whether your system is a not-for-profit entity and if so provide the relevant Tax Exempt Code.

Population Served:

Provide the population served. Choose one the Census Type options, "City/Town (Annual)", "Federal (10 year)" or "Other." If "Other" is selected you must describe your method (e.g. number of customers). Use the most recent census data available. Often, this is a local census available from town or city government.

Source of Supply: (Vendor only)

Provide the source of the water delivered to the vending machine.

Maintenance and Operation: (Vendor only)

For each of the listed service activities select the frequency that it was performed during the past year.

Testing Requirements for Lead, Copper and Bacteria: (COM/NTNC only)

This is provided for your information. If inaccurate please note this in the Comments at the bottom of the form.

<u>Distribution Meter Information:</u> (COM/NTNC and TNC only)

a. Number of Service Connections:

This is the total number of connections to the distribution system through which water can be obtained (other than hydrants). It includes metered and unmetered connections, public and private connections, and year-round and seasonally used connections.

b. Percentage of service connections that are metered:

This is the percentage of the water system service connections that are metered. For example if there are 400 service connections and 20 do not have meters (municipal buildings, schools, etc.), then the system is 95% metered (380/400 x 100). If every service connection is metered, then the system is 100% metered.

c. Are all publicly owned buildings metered? (COM/NTNC only)

d. Answer "yes" only if all public buildings (schools, police stations, fire stations, etc.) are metered. If No, what percent are? Enter the percentage of service connections to public buildings (including schools) that are metered. If there are 20 service connections to public buildings, and 15 have meters, then 75% of public buildings are metered (15/20 x 100).

System Information: (COM/NTNC and TNC only)

a. Number of Distribution Systems:

Indicate the number of physically separate distribution systems at your PWS.

b. Finished Water Storage Capacity (MG):

This is the total volume capacity of water tanks in your system, in millions of gallons. Example: There are three tanks in your system, with capacities of 1,500,000 gallons, 2,000,000 gallons, and 750,000 gallons. The total storage capacity = 1,500,000 + 2,000,000 + 750,000 = 4,250,000 gallons. 4,250,000 gallons/1,000,000 = 4.25 MG

c. Pumping Capacity (GPM):

This is the aggregate pumping capacity of all your sources in gallons per minute (GPM).

Percentage of Source Types: (COM/NTNC only)

This is the percent of each source of raw water obtained for the system. Together the four types of source water must add to 100% of the total raw water.

Cross Connection Control Program: (TNC only, COM/NTNC has a stand-alone form)

Provide the date of the most recent cross connection survey, the surveyor's name, phone number and MA certification number.

If your system has any Reduced Pressure Backflow Preventer (RPBP) or Double Check Valve Assembly (DCVA) devices you must provide a list showing the Device Location and the Test Date(s) for the reporting year. You may enter this information directly into the form or use the attachment feature (see Section 3.3) to submit this documentation.

Emergency Response Actions: (COM/NTNC and TNC only)

- a. Indicate whether you have an Emergency Response Plan (ERP) for your system. Do not attach your ERP to the ASR. Your ERP will be reviewed during your next sanitary survey. Also indicate whether or not you have made changes to your ERP.
- b. Indicate whether or not you have an Emergency Response (ER) annual training plan.
- c. Indicate whether or not your system is registered for the Health and Homeland Alert Network (HHAN).
- d. Indicate whether or not your system has joined the Massachusetts Water and Wastewater Agency Response Network or any other mutual aid organizations.
- e. Indicate how often your system tests all alarms, interlocks and back-up power sources. Select one of the options, "Monthly", "Quarterly", "Annual", "Other." If "Other" is selected please describe.
- f. List all Level 3 or higher ER incidents during the reporting period. Provide the Date of the incident, Level and a Description.

Do you have antennae or other appurtenance attached to your storage tank(s)?: (COM/NTNC only)

If yes, list all antennae and/or appurtenance. Provide the tank name, type of antennae and/or appurtenance (may include cell phone transmitters and receivers, and/or police, fire or other municipal communication equipment that is attached to your storage tank), the owner of the antennae and/or appurtenance, and the date of installation.

Comments:

5.3 Treatment Plants

Be sure to thoroughly review the Treatment Plant section of the ASR.

Check for accuracy of treatment plant names and the sources treated

Ensure all chemicals applied are listed and those no longer in use are end-dated.

Massachusetts Department of Environmental Protection PWSID#: 1008000 Bureau of Resource Protection - Drinking Water Program Name: AMHERST DPW WATER DIVISION When you first open the Treatment 2009 Public Water Supply Annual Statistical Report City: AMHERST Plants form, all of the treatment Reporting Period 1/1/2009 - 12/31/2009 PWS Class: COM plants of the PWS will be listed. Depending upon the number of Show all treatment plants • treatment plants, the form may be ATKINS WTP CENTENNIAL WTP BABY CARRIAGE BROOK WTP Edit Delete considerably long. To display only WELL #1 & #2 WTP one treatment plant you may select WELL #3 WTP ATKINS WTP a treatment plant from the drop-NELL #5 WTP Plant Name: down list located at the top of the Street Address Line 1: Street Address Line 2: form. AMHERST 01002-0000 City/Town: State(2 letter abbreviation) Zip

Each Treatment Plant has three sections (Plant Information, Related Sources, and Treatment Tables) which must be acted upon separately using the "Edit" or "Delete" links or the "Add" buttons in order to change the information they contain.

Plant ID#:

Plant ID # is the MassDEP issued number for each treatment plant such as 1029000-03T where 1029000 is the PWS ID and -03T designates that it is the third treatment plant of that PWS.

Plant Name:

Plant Name is the common name such as Atkins Water Treatment Plant.

Treatment Plant Street Address:

Treatment Plant Street Address is the physical location of the treatment plant. If the treatment plant does not have a standard street address, a descriptive address, such as Off Main Street for Street Address Line 1, is acceptable. Provide City/Town, State and Zip Code as well.

Status:

Options are, "Active" and "Inactive." Inactive status is reserved for plants that have been abandoned.

Availability:

Abandoned means a treatment plant that is physically disconnected from a public water system and is no longer maintained as an active, inactive, or emergency treatment plant.

Active means an approved treatment plant used for primary or backup purposes to meet consumer demand as necessary.

Emergency means any treatment plant used to supplement or temporarily replace a public water system's active or inactive treatment plants. An emergency treatment plant may be placed on-line only after the Department's approval.

Inactive means an approved treatment plant that is expected to be off-line for at least one year (12 months). A treatment plant may be deemed inactive only upon written approval of the Department. An inactive treatment plant may not return to active status without written approval from the Department.

Class:

The treatment class as determined by MassDEP is displayed. If you believe the treatment class for a treatment plant is inaccurate, include a comment in the comments section of the treatment plant.

Capacity:

This is the volume of water (in million gallons) that the plant is able to treat in a day.

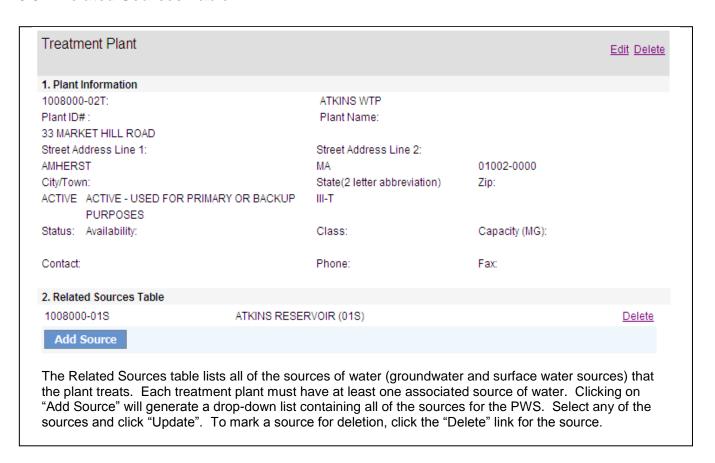
Contact:

Provide the name, phone number, and fax number of the contact person for the treatment plant.

Comments:

Comments specific to each plant can be added. This field appears below the Treatment Table but is open for edits when you are making changes to the Plant Information.

5.3.1 Related Sources Table



5.3.2 Treatment Table(s)

Each treatment plant may contain one or more treatment tables. A treatment table represents one treatment objective/treatment process used at the treatment plant. MassDEP maintains a historical record of treatment for each treatment plant of a PWS. In order to maintain an accurate historical record, a treatment table entry should be deleted only when the treatment objective/treatment process has never been used at the treatment plant. For existing records you will only be able to edit the start and end dates of the treatment objective/treatment process. If a treatment objective/treatment process is currently not used but has been used in the past you should provide an end date of when the treatment was discontinued. If you choose to "Add Treatment" you will be able to select values for all the fields.

Innovative:

The U.S. Environmental Protection Agency has established a list of paired treatment objectives and treatment process to describe the activities at plants. They recognize that these pairings and choices may not be sufficient

to capture new technology or new uses of existing technologies. If your plant has implemented an objective/process pair that does not appear in the established list or has a process that is not described by the listed choices then you should select "Yes" for innovative treatment. This will allow you to pair any objective with any process including the generic choice, "Innovative Treatment Process." If you select this generic process name you must provide a description in the comment field within the treatment table (not the form Comment field at the bottom of the page).

Treatment Objective:

This list describes the purpose of the treatment. Options include, "Corrosion Control", "Dechlorination", "Disinfection", "Disinfection", "Disinfection", "Disinfection", "Inorganics Removal", "Iron Removal", "Manganese Removal", "No Treatment At Source", "Organics Removal", "Other", "Particulate Removal", "Radionuclides Removal", "Softening (Hardness Removal)", "Taste / Odor Control."

Treatment Process:

This list describes the process by which treatment occurs. Options include, "Activated Alumina", "Activated Carbon, Granular", "Activated Carbon, Powdered", "Aeration, Cascade", "Aeration, Diffused", "Aeration, Packed Tower", "Aeration, Slat Tray", "Aeration, Spray", "Algae Control", "Bone Char", "Brominization", "Chloramines", "Chlorine Dioxide", "Coagulation", "Distillation", "Electrodialysis", "Filtered", "Filtration, Cartridge", "Filtration, Diatomaceous Earth", "Filtration, Greensand", "Filtration, Pressure Sand", "Filtration, Rapid Sand", "Filtration, Slow Sand", "Filtration, Ultrafiltration", "Flocculation", "Fluoridation", "Gaseous Chlorination, Post", "Gaseous Chlorination, Pre", "Hypochlorination, Pre", "Inhibitor, Bimetallic Phosphate", "Inhibitor, Hexametaphosphate", "Inhibitor, Orthophosphate", "Inhibitor, Polyphosphate", "Inhibitor, Silicate", "Innovative Treatment Process", "Iodine", "Ion Exchange", "Lime - Soda Ash Addition", "Microscreening", "No Treatment / Not Applicable", "Not Subject To SWTR", "Ozonation, Post", "Ozonation, Pre", "Permanganate", "Peroxide", "PH Adjustment, "pH Adjustment, Post", "pH Adjustment, Pre", "Rapid Mix", "Reducing Agent, Sodium Bisulfate", "Reducing Agent, Sodium Sulfite", "Reducing Agent, Sulfur Dioxide", "Reducing Agents", "Treatment Applied At Plant", "Treatment Applied At Point Of Entry", "Ultraviolet Radiation", "Unfiltered, Avoiding Filtration", "Unfiltered, Must Install Filtration."

Start Date:

The date when the treatment objective/treatment process was first started.

End Date:

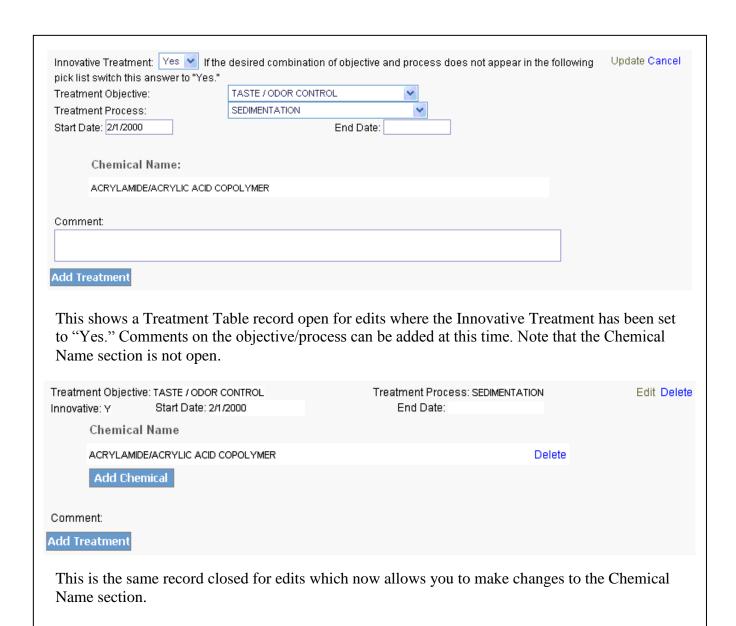
The date when the treatment objective/treatment process was discontinued.

Comment:

Provide comments specific to each record in the Treatment Table.

Chemical Name:

Although this entry appears within each Treatment Table record it is a distinct section that must be opened and edited separately. Select the chemical name used as part of the treatment objective/treatment process. You may add as many chemicals as are used. If the chemical name(s) is not listed, use the Comments section at the bottom of the form to list the chemical name(s).



5.4 Pump Stations

Pump Station Name:

Pump Station Name is the common name such as Well #2 Pump or Grove St. Booster Station.

Location:

Location is a physical address or descriptive location of the pump station, such as Grove St. or Off Main Street.

Function:

Provide the purpose of the pump station.

Status:

Options are, "Active" and "Inactive." Inactive status is reserved for plants that have been abandoned.

Availability:

Abandoned means a pump station that is physically disconnected from a public water system and is no longer maintained as an active, inactive, or emergency pump station.

Active means an approved pump station used for primary or backup purposes to meet consumer demand as necessary.

Emergency means any pump station used to supplement or temporarily replace a public water system's active or inactive pump station. An emergency pump station may be placed on-line only after the Department's approval.

Inactive means an approved pump station that is expected to be off-line for at least one year (12 months). A pump station may be deemed inactive only upon written approval of the Department. An inactive pump station may not return to active status without written approval from the Department.

Number of Pumps:

The number of pumps available for routine use.

Number of Emergency Pumps:

The number of pumps available for use in an emergency.

Raw or Finished Water:

Select the type of water, "Raw" or "Finished."

Maximum Aggregate Capacity (GPM):

Provide the volume of water in gallons that can be pumped per minute by the station.

Standby/Emergency Power:

Indicate whether the pump station has standby or emergency power.

Primary Pump Details

Suction Type: Select "Combined" or "Separate."

Suction Head (ft):

Suction Size (inches):

Motor Horse Power:

Motor Type:

Motor Control: Select "Automatic" or "Manual."

Discharge Type: Select "Combined" or "Separate."

Discharge Size (inches):

Installation Date:

Model #:

Pump Manufacturer:

Related Sources Table:

The Related Sources table lists all of the sources of water (groundwater and surface water sources) that are pumped by the station. Clicking on "Add Source" will generate a drop-down list containing all of the sources for the PWS. Select any of the sources and click "Update". To mark a source for deletion, click the "Delete" link for the source.

5.5 Storage Facilities

Storage Facility Name:

Storage Facility Name is the common name such as Prospect Hill Storage or Tank #2.

Location:

Location is a physical address or descriptive location of the storage facility, such as Pine Nook Rd.

Status:

Options are, "Active" and "Inactive." Inactive status is reserved for tanks that have been abandoned.

Availability:

Abandoned means a pump station that is physically disconnected from a public water system and is no longer maintained as an active, inactive, or emergency pump station.

Active means an approved pump station used for primary or backup purposes to meet consumer demand as necessary.

Emergency means any pump station used to supplement or temporarily replace a public water system's active or inactive pump station. An emergency pump station may be placed on-line only after the Department's approval.

Inactive means an approved pump station that is expected to be off-line for at least one year (12 months). A pump station may be deemed inactive only upon written approval of the Department. An inactive pump station may not return to active status without written approval from the Department.

Storage Type:

Select one of four options: "Elevated Storage Tank", "Ground Level Storage Tank", "Hydropneumatic Storage Tank", and "Underground Storage Tank."

Capacity:

Provide the maximum volume of the storage tank, in millions of gallons (MG).

Material

Provide the type of material the storage tank is made of, such as concrete, steel, fiberglass, etc.

Installation Date:

Provide the date the tank was installed.

Comments:

Comments specific to each tank can be added.

5.6 Cross Connection Control Program (COM/NTNC only)

Cross Connection Program Coordinator:

You must select one of the three options: Keep current coordinator, Remove current coordinator and add new coordinator information referencing a MassDEP Certification ID or Remove current coordinator and add new coordinator by typing into the fields.

If you remove the current coordinator and wish to enter a MassDEP Certification ID you will see a new field appear where you can directly enter the MassDEP Certification ID. As you type a drop down list will appear with suggested IDs. You must select a known ID from the drop down list to continue with this option. Press the "Add Coordinator" to populate the information about the coordinator. If the ID does not appear in the drop down list go back to the three options list and select the last option (typing into the fields).

Provide the first and last name of the coordinator along with a business name (or individual's name). The MassDEP Certification ID # and Expiration Date can not be edited – they are provided for display only. Provide the street address, City/Town, State, Zip Code, Phone, FAX and email address for the coordinator.

Surveyor Personnel Information:

Surveyor Personnel Information: To add a surveyor, enter the certifica tion ID # in the field bel ow and then click the "Add Surveyor" button. MassDEP Certification ID Humber								
Surveyor's FirstName	Surveyor's LastName	Doing Business As (Company/ Individual Name)	MassDEP Certification ID Number	Expiration Date	Phone Number			
Add Surveyor	KACZENSKI	KACZENSKI, DAVID	1057		413-498-5723 Delete			

Existing Surveyor information may be pre-populated into the table. You may delete this information if it is incorrect by selecting the "Delete" link on the right hand side. New Surveyor information can only be added by using a known MassDEP Certification ID Number. Enter the ID into the box which will generate a drop down list as you type of known IDs. Select the ID from the list the press the "Add Surveyor" button to enter

Tester Personnel Information:

This table works just like the Surveyor Personnel Information table.

Third Party/Consultant Services:

If your system used a third party or consultant for cross connection services check "Yes" and provide the Name, Address, Phone. FAX and email for this party/consultant. If you check "No" the rest of question 2 may be skipped.

Third Party/Consultant Surveyor Personnel Information:

This table works just like the Surveyor Personnel Information table.

Third Party/Consultant Tester Personnel Information:

This table works just like the Surveyor Personnel Information table.

Third Party/Consultant Services Provided:

Check as many selections as necessary.

Surveyor Reviewer:

This table works just like the Surveyor Personnel Information table with the exception that new information will overwrite existing information rather than creating a new row.

Survey:

Indicate whether your system has completed a cross connection survey of all commercial, industrial, institutional and municipal facilities. Provide the actual or anticipated completion date.

Facility Summary:

For each of the four listed types of facilities, indicate the total number of facilities served, the number of facilities that were surveyed prior to current reporting year and the number surveyed during the reporting year. The number of facilities remaining to be surveyed will calculate automatically. Additionally, provide the number of facilities that were resurveyed during the reporting year.

Reduced Pressure Backflow Preventers and Double Check Valve Assemblies:

Indicate whether you system contains any RPBPs or DCVAs. If "No" to both you can skip to question 9. If "Yes" to either one you will need to complete the relevant part(s) of questions 6, 7 and 8.

RPBP and DCVA Summary:

For each of the four listed types of facilities, indicate the total number of devices prior to the current reporting year, the number of new devices in installed during the reporting year and the number of devices removed and not replaced for the reporting year. The total number of devices will calculate automatically. Additionally, provide the number of seasonal devices that are counted in the total.

RPBP/DCVA Testing:

Provide the number of tests (initial and routine) as well as the number of failures and the number of repairs and retests.

RPBP/DCVA Inventory:

Indicate whether you can provide MassDEP a list of these devices within 2 hours.

Pressure Vacuum Breakers and Spill Proof Pressure Vacuum Breakers:

Indicate whether your system deals with these devices. If so, provide the testing summary for the current reporting year.

Maximum Time to Protect:

Choose one.

Residential Educational Program:

NTNC systems may leave this question blank.

Other Educational Programs:

If, "Yes" you may select as many as necessary.

Hose Bib Program:

Local Controls:

If you need to mail a copy of these controls to MassDEP you can either mail it to the address shown or, if it is available electronically, it can be attached to this eASR once all the forms have been validated (see Section 3.4)

Total Containment Policy:

Cross Connection Incidents:

Provide the date of the Incident, location and description.

Comments:

5.7 Source Protection – Watershed

Watershed ID #:

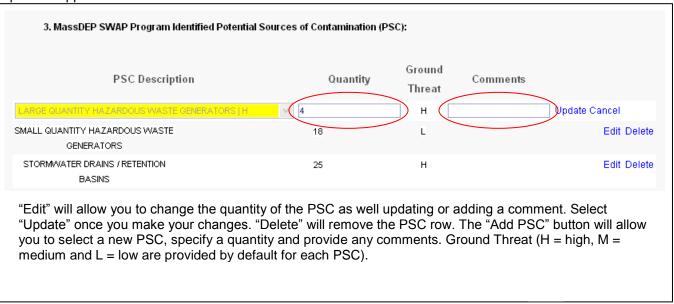
MassDEP assigned ID. View only.

Source ID:

The only part of this information that can be edited are the comments. If for some reason you believe the wrong source is associated with the watershed provide a comment at the bottom of the record.

Potential Sources of Contamination:

The PSCs that were identified within the watershed in your system's Source Water Assessment Program (SWAP) report will appear in this table.



Questions 4, 5 and 6 are in a different section. You need to select "Edit" on the right hand side in order to answer them.

Inspections:

Indicate whether any new threatening land uses or activities were found during the reporting year. Describe if necessary.

Violations:

Indicate whether your inspection identified any violations of state or local land use controls. Describe if necessary.

Reporting:

If there were any violations, indicate whether you reported them to town officials.

Comments:

5.8 Source Protection - Zone II

Zone II ID #:

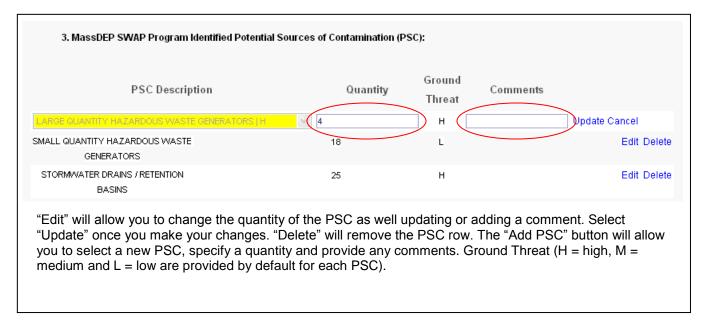
MassDEP assigned ID. View only.

Source ID:

The only parts of this table that can be edited are the status of the Zone I Control and the Sources of Pollution in Zone I. If for some reason you believe a wrong source(s) is associated with the Zone II provide a comment at the bottom of the record.

Potential Sources of Contamination:

The PSCs that were identified within the Zone II in your system's Source Water Assessment Program (SWAP) report will appear in this table.



Questions 4, 5 and 6 are in a different section. You need to select "Edit" on the right hand side in order to answer them.

Inspections:

Indicate whether any new threatening land uses or activities were found during the reporting year. Describe if necessary.

Violations:

Indicate whether your inspection identified any violations of state or local land use controls. Describe if necessary.

Reporting:

If there were any violations, indicate whether you reported them to town officials.

Comments:

5.9 Source Protection – IWPA

IWPA ID #:

MassDEP assigned ID. View only.

IWPA Radius:

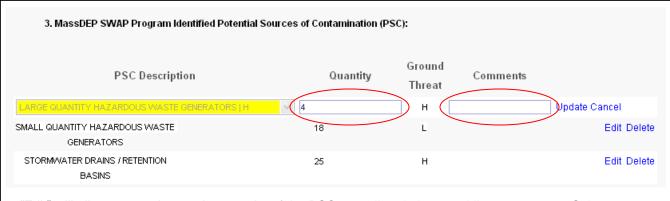
MassDEP assigned value. View only.

Source ID:

The only parts of this table that can be edited are the status of the Zone I Control, the Sources of Pollution in Zone I and comments. If for some reason you believe a wrong source(s) is associated with the IWPA provide a comment at the bottom of the record.

Potential Sources of Contamination:

The PSCs that were identified within the Zone II in your system's Source Water Assessment Program (SWAP) report will appear in this table.



"Edit" will allow you to change the quantity of the PSC as well updating or adding a comment. Select "Update" once you make your changes. "Delete" will remove the PSC row. The "Add PSC" button will allow you to select a new PSC, specify a quantity and provide any comments. Ground Threat (H = high, M = medium and L = low are provided by default for each PSC).

Questions 4, 5 and 6 are in a different section. You need to select "Edit" on the right hand side in order to answer them.

Inspections:

Indicate whether any new threatening land uses or activities were found during the reporting year. Describe if necessary.

<u> Violations:</u>

Indicate whether your inspection identified any violations of state or local land use controls. Describe if necessary.

Reporting:

If there were any violations, indicate whether you reported them to town officials.

Comments:

5.10 Ground, Surface, and Purchased Water Sources

This section summarizes the monthly pumping of raw water from each source that the PWS operates. For the Ground Water and Surface Water forms this is raw, untreated water pumped from a well or surface water intake. Regulations require sources of water to be metered.

Each source is a separate section on the form that the "Edit" link will open for updates. Choose "Update" (saves changes) or "Cancel" (does not save changes) to close a source record.

Source ID:

MassDEP assigned ID. View only. The first seven digits are the PWSID followed by a dash then two numbers and a letter (G, S or P).

Source Name:

Source Name is the common name such as Main Street Well No.1 for a groundwater well or Adams Pond for a surface water intake.

Location:

Location is the physical address or descriptive location of the source.

Seller ID # (PWS ID): (Purchased Water only)

This is the seven digit PWS ID of the system that supplies this water. View only.

Seller Name: (Purchased Water only)

This is the PWS Name of the system that supplies this water. View only.

Status:

Options are, "Active" and "Inactive." Inactive status is reserved for plants that have been abandoned.

Source Availability:

Active Source means an approved source(s), monitored and maintained to meet 310 CMR 22.00 and used for primary or backup purposes to meet consumer demand as necessary.

Inactive Source means an approved source(s) that is expected to be off-line for at least one year (12 months). A source may be deemed inactive only upon written approval of the Department. An inactive source may not return to active status without written approval from the Department. Monitoring as specified at 310 CMR 22.00, is not required during the time that the source is inactive, unless otherwise specified by the Department.

Emergency Source means any source of water used to supplement or temporarily replace a public water system's active or inactive source(s) when water of sufficient quality or quantity is not available. An emergency source may be placed on-line only after the Department's approval pursuant to a declaration of a state of water emergency under M.G.L. c. 21G §§ 15-17 or as a requirement of a Department administrative order.

Abandoned Source means a source that is physically disconnected from a public water system and is no longer maintained as an active, inactive, or emergency source. Abandoned source(s) can not be used as a public water supply source. A source may only be abandoned pursuant to 310 CMR 22.25.

Comment:

Comments specific to each source can be added.

<u>Latitude and Longitude:</u> (Ground Water and Surface Water only) View only.

Source Watershed: (Ground Water and Surface Water only)

Select from one of the options: "BLACKSTONE", "BOSTON HARBOR", "BOSTON HARBOR-MYSTIC", "BOSTON HARBOR-NEPONSET", "BOSTON HARBOR-WEYMOUTH AND WEIR", "BUZZARDS BAY", "CAPE COD", "CHARLES", "CHICOPEE", "CONCORD", "CONCORD-ASSABET", "CONCORD-CONCORD AND SUDBURY", "CONNECTICUT", "DEERFIELD", "FARMINGTON", "FRENCH", "HOUSATONIC", "HUDSON",

"HUDSON-BASH BISH", "HUDSON-HOOSIC", "HUDSON-KINDERHOOK", "IPSWICH", "ISLANDS", "MASSACHUSETTS COASTAL", "MERRIMACK", "MILLERS", "NARRAGANSET BAY AND MT. HOPE BAY SHORE", "NASHUA", "NORTH COASTAL", "PARKER", "QUINEBAUG", "SHAWSHEEN", "SOUTH COASTAL", "SOUTH COASTAL-NORTH AND SOUTH RIVERS", "SOUTH COASTAL-SOUTH COASTAL SHORE", "TAUNTON", "TEN MILE", "WESTFIELD."

Well Type: (Ground Water only)

Select from one of the options: "BEDROCK WELL", "DUG", "GRAVEL-DEVELOPED (GRAVEL-WALLED)", "GRAVEL-PACKED", "HORIZONTAL WELL", "RAINEY WELL", "SPRING", "TUBULAR (OR LARGER DIAMETER) WELLFIELD."

Well Depth: (Ground Water only)

Enter a value, if known, in feet.

Well Casing Height: (Ground Water only)

Enter a value in feet.

Well Casing Depth: (Ground Water only)

Enter a value, if known, in feet.

Screen Length: (Ground Water only)

Enter a value, if known, in feet.

Construction Type: (Ground Water only)

Only one value currently exists in our pick list, "GRAVEL." Leave blank if not appropriate.

Pump Setting: (Ground Water only)

Enter a value, if known, in feet.

Safe Yield: (Ground Water and Surface Water only)

Enter a value in million gallons per day.

Approved Daily Pumping Volume: (Ground Water only)

MassDEP assigned value in million gallons per day.

Terminal Reservoir: (Surface Water only)

Enter "Yes" if this is the body of water that contains the intake to the plant.

Watershed Area: (Surface Water only)

Enter a value in square miles.

USGS Elevation: (Surface Water only)

Enter a value in feet.

Surface Area: (Surface Water only)

Enter a value in acres.

Storage Capacity: (Surface Water only)

Enter a value in million gallons.

Watershed Plan: (Surface Water only)

Enter "Yes" if you have a MassDEP approved Surface Water Supply Protection Plan.

SWTR Waiver Granted: (Surface Water only)

Enter "Yes" if MassDEP has approved a waiver from filtration under the Surface Water Treatment Rule.

Safe Yield: (Ground Water and Surface Water only)

Enter a value in million gallons per day.

Source Metered:

Enter "Yes" if the source has a meter. A "Yes" will open the rest of the form for entry – MassDEP does not accept estimated volumes.

Date of Meter Installation:

Provide the date that the current source meter was installed.

Type of water metered for source:

Select "Raw" or "Finished."

Last Meter Calibration:

Provide the most recent date that the meter for this source was calibrated.

Withdrawal Units (check one):

Check whether you are reporting your withdrawal volume in gallons (GAL) or million gallons (MG).

Example:

For March Well # 1 pumped 4,350,800 gallons.

If reported as GAL: 4,350,800 If reported as MG: 4.3508

Months:

Provide the total metered withdrawal for each month that the source was in operation.

Total # of Days Pumped:

Provide the total number of days in the year that this source was pumped for water supply.

Maximum Single Day Pumped Volume:

For each source, provide the highest one-day volume that was pumped during the year.

Date Maximum Amount Pumped:

Provide the date on which the above maximum one-day pumping occurred. If the maximum one-day pumping happened on multiple days, then provide the first date on which this occurred.

Comments:

Use this section to provide any comments on the form including any information necessary to further explain any data on the form or where the form may not have allowed you to give the answer you felt was correct.

5.11 Water Production & Consumption Information

Massachusetts Drinking Water Regulations require reporting of finished water volumes. The Massachusetts Water Management Act requires that raw water volumes be metered and reported to MassDEP. All suppliers must report their finished water volumes. Suppliers that have different finished and raw water volumes (as a result of treatment process losses) must report raw water volumes separately.

Volume Units:

Indicate whether all volumes are being reported as gallons or million gallons.

FINISHED Water Production and Consumption Summary for Last Year:

lonth	(1) Amount of finished water from own sources (GAL)	(2) Amount of finished water purchased from other systems (GAL)	(3) Amount of finished water sold to other systems (GAL)	(4) Net finished Water that entered your distribution system (1) + (2) - (3)= (4) (GAL)
anuary	100	0	0	100
ebruary	101	0	0	101
March	102	0	0	102
April	103	0	0	103
Иay	104	0	0	104
June	105	0	0	105
July	106	0	0	106
August	107	0	0	107
September	108	0	0	108
October	109	0	0	109
November	110	0	0	110
December	111	0	0	111
TOTAL	1266	0	0	1266

For each month of operation provide the finished water volumes pumped from your sources after treatment (if any) and/or purchased from another system (if any) and/or sold to another system (if any). For groundwater sources where treatment is limited and does not result in a reduction in volume (e.g. adding chemicals for corrosion control or disinfection) the volume of raw water pumped from the wells will be the same as the finished water available to the system. If finished water volumes are the same as raw water volumes for your own water, purchased water and sold water, then you only need to complete this table. When you finish entering values into the monthly fields in columns 1 through 3 press the "Calculate Net Finished Water" button to populate column 4. If you make changes to any values you will need to press this button ("Recalculate Net finished water") again to redo the calculation.

Maximum Daily Finished Water Consumption:

Provide the highest one-day volume of finished water pumped during the calendar year. Include the date on which this occurred.

RAW Water Production and Consumption Summary for Last Year:

If finished water volumes are the same as raw water volumes (no treatment plant losses occur), indicate by checking the "Same as finished water" option and skip this table. For surface water systems and groundwater requiring further treatment, treatment plant losses will result in finished water volumes less than the raw water volumes. For each month of operation provide the raw water volumes pumped from your sources and/or purchased from another system (if any) and/or sold to another system (if any) When you finish entering values into the monthly fields in columns 1 through 3 press the "Calculate Net Raw Water" button to populate column 4. If you make changes to any values you will need to press this button ("Recalculate Net raw water") again to redo the calculation.

Maximum Daily Raw Water Consumption:

Provide the highest one-day volume of raw water pumped during the calendar year. Include the date on which this occurred.

Summary of Water Sold:

Summarize water sold to other systems. Provide the System Name(s), PWS ID(s) and volumes of water sold. Also indicate if the water sold was raw or finished.

Metered Finished Water Consumption by Service Type:

The U.S. Environmental Protection Area requires every PWS to report what their water is used for in order to characterize each system. In this table report the percentage of metered water for each category below, **ONLY** for those categories over 10%. For municipal water suppliers, most of the water will be reported as Residential Area. If any other categories are more than 10% of your metered use, report it in the appropriate category. If any category is less than 10%, do NOT report it. The percentages do NOT have to add to 100%, since water use in some categories will be less than 10% and therefore is not reported. The following are descriptions of the various categories of service types. U.S. EPA requires MassDEP to collect and report water use data in these categories. Some categories may be more applicable to other parts of the country with different demographics and development practices. For most Massachusetts communities, MassDEP expects the majority of residential service types to be accounted for under Residential Area.

<u>Day Care Center:</u> This includes facilities for the care of children that are not educational facilities. These facilities are generally for taking care of young children during business hours while parents are working.

<u>Dispenser:</u> These facilities sell water retail to individual customers. This includes retail water-dispensing kiosks where customers fill water bottles.

<u>Homeowners Association:</u> This is when one service connection and meter serves an entire condominium association building. If each condo within a complex has its own meter, then include them in the Residential Area category. This category also includes one service connection to a group of detached, single or multi-family homes that are part of a homeowners association with common property, maintenance fees, etc.

Hotel/Motel: Provide overnight rooms at a daily rate, including bed & breakfast facilities.

<u>Highway Rest Area:</u> Includes service areas on limited access highways with restroom facilities. Restaurants operating at the rest area would be included in the restaurant category if metered separately.

<u>Industrial and Agricultural:</u> Industrial includes services that provide water primarily for industrial processes or manufacturing, including factories and electric power plants. Agricultural includes water for growing fruits and vegetables for human consumption, water for raising animal feed such as corn, water used for animal husbandry, and water used for wholesale or retail nurseries.

Interstate Carrier: These are bulk carriers that truck water across state lines for use as public drinking water.

<u>Institutions:</u> (prisons, mental facilities, nursing & rest homes, universities, colleges, dormitories) Includes service connections to facilities that house large numbers of people for extended periods of time in a group setting without separate household quarters. This includes boarding schools and colleges and universities with dormitories.

Medical Facility: This includes hospitals, rehabilitation centers, clinics, and doctors' offices.

<u>Mobile Home Park:</u> (non-primary residence) These service connections are generally to mobile homes in mobile home parks that are used seasonally, on weekends, or otherwise not used by their occupants as their primary residence. These service connections would be expected to be used cumulatively less than six months during the year.

<u>Mobile Home Park (principal residence):</u> This category is for mobile home parks used as principal, year-round residences by the occupants. Single mobile homes that are not part of a mobile home park should be included in the Residential Area category.

Municipality: These are metered services providing water to a municipal building, park, playing field or other use.

This category does not include public K-12 schools (report as "Schools"). Non-metered municipal uses such as hydrant flushing and street cleaning are not included here.

Other Area: This includes any metered uses that do not fit into any other category. Provide a description of the area in the Comments at the bottom of the form.

Other Non-Transient Area: This includes other non-transient water service types that do not fit in any other category. Provide a description of the service type in the Comments at the bottom of the form.

Other Residential Area: This includes other residential service connections that do not fit in any other residential category. Provide a description of the facility in the Comments at the bottom of the form.

Other Transient Area: This includes other transient water services types that do not fit into any other category such as office buildings and other workplaces that do not provide retail services to customers. It also includes public and private campgrounds and RV parks. Provide a description of the service type in the Comments at the bottom of the form.

<u>Recreation:</u> These are commercial entities in which most of the water is used for other than human consumption such as golf courses, ski areas and water parks.

<u>Residential Area:</u> These are service connections to single-family homes, multi-family homes and apartment buildings. Most residential service connections in Massachusetts are going to fall in this category, and many PWSs will report all their residential water use in this category.

<u>Restaurant:</u> This includes fast-food restaurants, take-out only restaurants, seasonal restaurants such as ice cream stands, diners, coffee shops, and sit-down restaurants with table service.

<u>Retail Employees:</u> This category includes stores and other retail outlets that sell products and services to customers. This includes food and non-food stores, beauty shops, post offices, movie theaters, etc.

<u>Schools:</u> (includes K-12) This includes all public and private schools with no residence halls. It would include higher education institutions such as community colleges that do not have dormitories. It does not include boarding schools, which would be reported as an "Institution."

Sanitary Improvement District: Refers to districts in the central U.S. Not applicable to Massachusetts.

<u>Summer Camp:</u> Children stay at these facilities, either during daylight hours or overnight, for one or more weeks during the summer only.

<u>Secondary Residences:</u> These service connections are generally to residences that are used seasonally, on weekends, or otherwise not used by their occupants as their primary residence. These service connections would be expected to be used cumulatively less than six months during the year. This would include lake or beach camps, hunting camps, ski condos, etc.

<u>Service Station:</u> These facilities sell retail gasoline and may or may not also provide mechanic services. This category includes convenience stores that sell retail gasoline and auto repair shops that do not sell gasoline.

<u>Subdivision:</u> This service type is when one service connection serves an entire subdivision consisting of multiple detached homes.

<u>Water Bottler:</u> These are facilities that bottle water for distribution to retailers. This includes water bottled for sale in stores, generally in one gallon or smaller containers, and water bottled for water coolers, generally in five-gallon containers.

<u>Wholesaler:</u> This includes entities that sell water in large quantities, for example trucking companies that sell tanker trucks of water to fill swimming pools, for construction sites, etc. This may also include hydro-seeding companies that fill their trucks from hydrants, if this use is metered.

Summary of Treatment Plant Losses:

Account for treatment plant losses (if any) in this table. Provide a Treatment Plant ID, the total amount of raw water that entered the treatment plant, the total finished water amount after treatment. The total water lost to treatment will be calculated automatically.

Treatment Waste:

Describe how your plant handles treatment wastes (slurry or sludge).

Comments:

Use this section to provide any comments on the form including any information necessary to further explain any data on the form or where the form may not have allowed you to give the answer you felt was correct.

5.12 Water Management Act Annual Report - Distribution

All PWSs must complete Tables DS-1 through DS-5, Table DS-7 and Table DS-8. Tables DS-6 and DS-9 are optional.

Table DS-1 Summary of Leak Detection Activities During the Reporting Year:

Use Table DS-1 to report the total miles of water mains in your system, the number of miles of main surveyed in the reporting year, the number of leaks found and repaired, the estimated volume water (in millions of gallons) lost during the reporting year (if possible) and the date of the last leak detection survey of the entire system.

<u>Table DS-2 Water Conservation – Limits on Withdrawals:</u>

Use Table DS-2 to summarize <u>mandatory</u> nonessential outdoor water use restrictions you implemented during the reporting year. Do not include voluntary restrictions. Nonessential outdoor water use may include lawn watering, car washing, pool filling, etc.

- Q1. Indicate whether or not you implemented mandatory restrictions. If "No", then proceed to Table DS-3. If "Yes", then use questions 2 through 4 to describe the restrictions.
- Q2. Indicate the reason(s) that mandatory restrictions were implemented.
- Q3. Describe the type(s) of mandatory outdoor water use restrictions implemented e.g. total ban, hand-held only, hourly or daily ban.
- Q4. Indicate on which dates mandatory restrictions were started and ended. Do not include periods of voluntary restrictions.

Table DS-3 Metered Finished Water Use:

Use Table DS-3 to report ALL water volumes metered through service connections. Include water not billed (e.g. schools, municipal playing fields, treatment plant purposes) and metered water volumes measured through temporary meters, whether for municipal or private use.

Residential Institutions are in a separate category in Table DS-3. This was done so that communities with colleges, prisons etc. can exclude the water used by these institutions from their Residential Gallons per Capita Day (RGPCD) calculations in Table DS-8. For the purposes of calculating RGPCD, a community should exclude residential institutions because of the difficulty in determining the seasonally fluctuating residential population of these institutions and the non-residential uses at the institution. Because the Residential Institutions water use is excluded from the RGPCD calculation, the population using the water must also be excluded.

All residential use volumes must be reported in Table DS-3 under "Residential", even if the water is billed at a commercial rate and the entity served is a for-profit customer. For example, if a for-profit apartment building is billed at a commercial rate, the water volume must be reported as Residential on Table DS-3. In addition, all water used at residential properties must be reported under the residential use category even if only used for landscaping irrigation (i.e. even if there is a separate watering meter, the volume is included under residential use).

	No. of Service	Total Volume	
Use Category	Connections	(mgy)	Category Description
Residential	5000	350	Water provided to residences in your distribution syst including for-profit apartments, condos, and seasonal hom All water used for lawn watering at residential buildings belo in this category.
Residential	5	10	Water provided to institutions with residential population such
Institutions			colleges. It is optional to account institutions volumes separa
			(may be included in Residential above - see instructions).
Commercial/Business	1	1	Water served to businesses and other commercial entities.
Agricultural	1	1	Water used mainly to grow food, raise animals, or run a gard
			center.
Industrial	1	1	Water used mainly for industrial purposes.
Municipal/Institutional/Non	1	1	Water used for municipal purposes, including schools, play
-profits			fields, municipal buildings, treatment plant; non-profits such
			churches; non-residential institutions such as private schools
Other*	1	1	Water used for purposes not included in above categories.
TOTALS	5010	365	Total number of service connections and metered volume.
(ReCalculate To	otal)	

Make sure the click on the "Calculate Total" button to get the total number of connections and total volume of metered water provided through service connections. The total volume of metered water in will automatically be transferred to "Total Metered Use" on Table DS-5 (Unaccounted for Water). If you make any changes you must click on the "Recalculate Total" button to pass the new total to Table DS-5.

Table DS-4 Confidently Estimated Municipal Use:

Table DS-4 is for reporting unmetered uses of water for municipal purposes. Losses of water due to ongoing leaks discovered during leak detection surveys are not included. Water lost to major water main breaks is included, but a description of the break must be provided (location, date, volume of water lost). For all of the water volume reported Table DS-4, provide calculations and documentation of how the volumes were calculated. Water volumes listed in Table DS-4 will be considered unaccounted for water (UAW) unless documentation is provided. Indicate whether you are attaching documentation as electronic files to the eASR. Paper copies can be mailed to the following address:

MassDEP 1 Winter Street Boston, MA 02108 Attn: Water Management Program

Be sure to put your PWS name and PWSID on every page of paper documentation you mail to MassDEP.

Table DS-4 Confidently Estimated Municipal Use volume To qualify as confidently estimated municipal use calculations/documentation for each estimated use must be attached to this ASR or mailed to MassDEP. If no documentation is provided, DEP will count the volumes as unaccounted for water. See ASR Instructions for more detail. Leak detection volumes are not counted as a confidently estimated municipal use. Optional Excel spreadsheets for calculating confidently estimated use can be found at the MADEP website at http://www.mass.gov/dep/water/approvals/dwsforms.htm#statrep

Confidently Estimated Municipal Use (CEMU) Fire protection & training Hydrant/water main flushing/main construction Flow testing Bleeders/ Blow offs Tank overflow & drainage Sewer & stormwater system flushing

Source meter calibration adjustments

Major water main breaks (not leak detection)

Total Confidently Estimated Municipal Use

Street cleaning

Estimated million gallons per year

0.25
+ 4.15
+ 0.1
+ 0
+ 2.5
+ 0.02
+ 0.05
+ 0
+ 0.5

7.57

ReCalculate Total

YOU MUST PROVIDE DOCUMENTATION FOR ALL OF YOUR CEMU VOLUMES.

Make sure the click on the "Calculate Total" button to generate the total CEMU. The total volume of metered water in will automatically be transferred to "Total CEMU" on Table DS-5 (Unaccounted for Water). If you make any changes you must click on the "Recalculate Total" button to pass the new total to Table DS-5.

Guidance on documentation of CEMU volumes. Below are descriptions of some of the ways that CEMU volumes can be documented.

<u>Fire Protection and Training:</u> This volume can be taken from data provided by the local Fire Department (Chief or Deputy's office) in writing or the volumes can be obtained from meters on booster pumps.

<u>Hydrant/water main flushing/main construction</u>: Volumes used during annual or biannual flushing of the distribution network can be calculated by using the number of hydrants times average volume flowed times number of times flushed. Some systems track tank levels before, during and after flushing to estimate volumes used. All hydrant and system flow test volume estimates must be presented in table form to be eligible for municipal use. Volumes of water used to fill new or replaced water mains may be calculated and reported in a tabular form, complete with street, project number or other identifying information.

<u>Flow testing:</u> Flow testing volumes can be calculated using completed Insurance Services Organization (ISO) flow sheets that provide hydrant locations, street addresses and flow rates. Multiply the flow rate for each test times the flushing time, rounded to 5-minute increments. All system flow test volume estimates should be presented in tabular form.

<u>Bleeders / Blow offs:</u> All bleeders should be metered whenever possible. Meter readings should be taken regularly to determine the volumes of water that are run to waste. Metered bleeder volumes should be reported on Table DS-3 under "municipal". For bleeders that cannot be metered, flow rate can measured using a bucket of known volume and a stopwatch and extrapolating an annual volume. Documentation (calculations) must be provided.

<u>Tank overflow & drainage</u>: When a storage tank is overflowed for water quality purposes, the overflow volume can be calculated using daily storage tank readings or flow out of the overflow piping can be calculated using 50% of the flow rate from pumps that are on in the system at the time of the overflow. The duration of the overflow is determined through observation and by when pumps are shut off or when instrumentation controls are adjusted to automatically shut off pumping systems.

<u>Sewer and stormwater system flushing</u>: Water volume used for stormwater flushing or in sewer main work can be confidently estimated through a metered volume using a hydrant meter/construction-type meter.

<u>Street cleaning</u>: Water volume used by street cleaning sweepers can be calculated by multiplying the volume of the street sweeper tank(s) times the number of times filled. Logs should be kept on file.

Source meter calibrations: To account for source meter calibration adjustments, you must provide calibration logs documenting calibration calculation. If you make adjustments to source water volumes, pro-rate adjustments over time. **Example:** Calibration in December 2006 shows that a source meter is under-reading by 12%. It has been 12 months since the last calibration, therefore adjust Jan 2006 upward by 1%, February upward by 2%, etc. Alternatively, taking 50% of the difference between the adjusted and non-adjusted volume results in the same as pro-rating by month as described above.

Major water main breaks: Leaking water found during leak detection surveys or otherwise discovered is not considered a municipal use and is not included in Table DS-4. However, very large individual short-term water main breaks can be claimed on a case-by-case basis. Document the date discovered, date repaired, duration of the break, cause (if known) and estimated water loss. MassDEP will review these submittals to determine eligibility.

Table DS-5 Unaccounted for Water:

	Million Gallons/Year (MGY)	% of Total Wat	er Available for Distribution
Total Finished Water Available for Distribution (Total Net Finished Water from Production Form)	390	100%	
Total Metered Use (System Total Metered Use from Table DS-3)	- 365	- 93.6	%
Total Confidently Estimated Municipal Use (Total from Table DS-4)	- 7.57	- 1.9	%
Unaccounted for Water (UAW)	ReCalculate Total	= 4.5	%
Enter the "Total Net Finished Water", in mill Consumption form. The Total Metered Use			

Table DS-6 Sources of Unaccounted for Water: (Optional)

Use Table DS-6 to provide estimates of the volumes of your unaccounted for water.

Residential Gallons per Capita Day (RGPCD):

Residential Gallons per Capita Day (RGPCD) is the volume of water an average resident uses on an average day in the reporting year. Two values are used to calculate RGPCD: the residential population served by a PWS and the total amount of residential metered use. RGPCD is calculated by dividing the total annual residential volume (in millions of gallons per year) by 365 (days in the year), multiplying by 1,000,000, and dividing that number by the residential population served by the PWS.

```
<u>Total residential metered use (MG)</u> x 1,000,000 = RGPCD (gal/day/person) 365 days x residential population served
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The total residential metered use is the Residential Total Volume from the first line of Table DS-3. This is the volume of water (in millions of gallons per year, MGY) provided through metered service connections to residential buildings in the calendar year. Since Residential Institution water use volume is not included, you must also exclude the population living at the institution from your RGPCD calculation.

RGPCD Step 1 - Determine Population Served

Definitions:

Fully served community: A city or town in Massachusetts in which 100% of the residential population obtains their drinking water from the PWS. If some homes within the town boundaries are served by private wells or another PWS, then it is not a fully served community.

Partially served community: A city or town in Massachusetts in which only a portion of the residential population living within the town boundary obtains their drinking water from the PWS.

Population Served Option 1: Accurate Count Using Census Data

Use Option 1 when the population served by the PWS can be accurately determined from U.S. census data, local census data, or other data. U.S. census data for your community can be found at http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. A more recent local census may be more accurate than the U.S. census, which was last done for every community in 2000. Some communities have more recent U.S. census data (e.g. larger towns and cities).

For *fully served communities* use the most recent census data (federal 2000 census or more recent local population data). The residential population served is the total residential population of the community.

For partially served communities use Option 1 when you can accurately determine the residential population served by a PWS from federal and/or local data sources. For example, the town clerk may have records of the number of residents at each dwelling, the PWS may have data on its residential customers, or the population of the community not served by the PWS (use private wells or are served by another PWS) is relatively small, can be accurately determined and can be subtracted from the entire population of the community to obtain the residential population served by the PWS.

Population Served Option 2: Estimate from Number of Households Served

Use Option 2 for partially served communities where the residential population served cannot be determined from census or other data and must be estimated from the number of households and average household size. To obtain an estimate of the population served, multiply the average community household size from federal census data by the number of households served by the PWS.

To obtain the average http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Under the "Community Facts" enter the town your PWS serves and the state of MA. Under "2010 Census" click on "Households and Families (Relationships, Children, Household Size, ...)" and a table of data will appear for the community you entered. Scroll down and use the "Average household size" value for the most recent year for which data is available. Do NOT use average family size.

The next step in estimating residential population served using Option 2 is to determine the number of households from the number of residential service connections. Sort service connections according to the number of households they serve. Each service connection has a separate water meter. If every service connection is to a single-family home, then the number of service connections will equal the number of households. Multi-family homes on one service connection will result in more households than service connections. Refer to the example below.

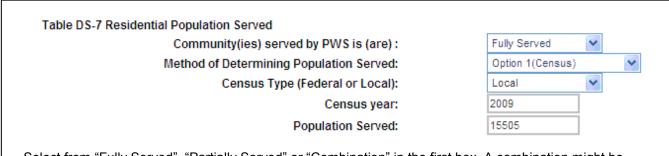
On MassDEP's website is an excel spreadsheet for estimating population served from the number of service connections and U.S. census average household size. A link to this excel file is at https://www.mass.gov/lists/drinking-water-permits-forms-and-templates#statistical-reporting-forms. Complete the worksheet for your community (or communities if you partially serve more than one community) and attach it electronically to the eASR.

Below is an example of a community with an average household size of 2.55 people per household. The estimated population served is 6,018 people, which is entered into Table DS-7.

			Number of		
	Total Number of		Households per		Number of
Type of Residential Service	Service Connections to		Service		Households for
Connection	Each Type	х	Connection	=	Each Type
Single-Family	2000	X	1	=	2000
Two-Family	45	X	2	=	90
Three family	15	X	3	=	45
50-unit apt bldg	2	X	50	=	100
25-unit apt bldg	5	X	25	=	125
20 and aprovag	Ů	X		=	0
		X		=	0
		X		=	0
		X		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
		Х		=	0
Sum up last	column to obtain total nu	mber	of households serv	ed:	2360
Enter the	Average Household Size	fron	n U.S. Census webs	ite:	2.55
Product of above two nu	mbers is the estimated re	eside	ntial population serv	<u>ed</u> :	6018

Enter into Table DS-7 of eASR.

Table DS-7 Residential Population Served:



Select from "Fully Served", "Partially Served" or "Combination" in the first box. A combination might be when a PWS fully serves one town and partially serves another. Do not consider water sold to another PWS. Select from "Option 1 (Census)", "Option 2 (# of households)" or "Combination" in the second box. If you used Option 1, indicate in the third box whether it is a local or federal census. Provide the year of the census you use. Lastly, enter the residential population served by your PWS.

Table DS-8 Residential Gallons per Capita Day (RGPCD):

RGPCD Step 2 - Calculate RGPCD

Table DS-8 Residential Gallons per Capita Day To determine RGPCD, your metered residential volume (million gallons/year) is divided by 365 days. The result in then divided by the population served and multiplied by 1,000,000 to obtain gallons per person per day. If you include Residential Institutions volume in your RGPCD volume, also include the Residential Institutions population. See ASR instructions

Residential Water Use	/ 365	/ Population Served	X 1.000.000	=	Residential Gallons per Capita Day
(million gallons)			,,		(gallons/person/day)
350	/365	/ 15505	X1,000,000	=	62

The "Residential Water Use" volume and the "Population Served" are automatically input from the values entered on Tables DS-3 and DS-7, respectively.

Table DS-9:

Use Table DS-9 to provide any comments or additional explanations. Do NOT use DS-9 to provide documentation of Confidently Estimated Municipal Use (CEMU) volumes. Such documentation must be either attached electronically to the eASR or be mailed to MassDEP's Water Management Program.

5.13 Water Management Act Annual Report - Basin Withdrawal

Table BW-1 Permit & Registration Information:

This table is pre-populated from DEP databases. Review for accuracy. Inaccuracies can be reported on Table BW-5 at the end of the report. You may have one, two or three basins listed.

Table BW-2 Average Daily Withdrawal by Watershed:

Enter the total volume of raw water pumped from each basin (in millions of gallons) during the reporting year. Press the "Calculate" button once you have entered the "Total Raw Water Pumped" to obtain the "Watershed Average Daily Withdrawal." This average is automatically transferred into Table BW-3.

Table BW-3 Authorized vs. Actual Withdrawal Volume:

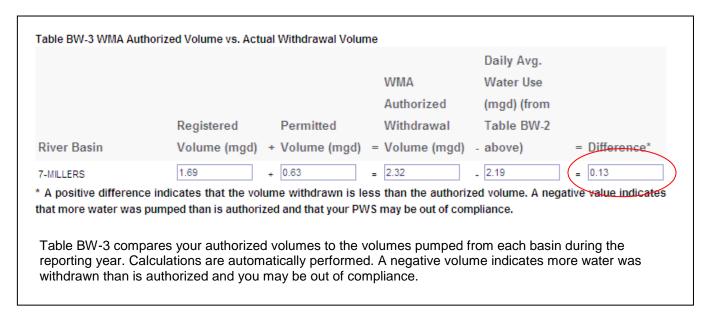


Table BW-4 Permit Special Conditions:

Describe any permit condition requiring an annual report to be submitted to MassDEP. Indicate if the report is attached (electronically) to the eASR. If hard copy was sent to MassDEP, indicate date submitted.

Table BW-5:

Use Table BW-5 to provide comments or additional information on the Basin Withdrawal Report.